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THE

LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

SATURDAY, JULY 19, 1884.

Societies.

LOUISVILLE MEDICAL SOCIETY.

Sub-peritoneal Abscess in the Male, occurring nearly Three Years after an Acute Attack of Perityphlitis.* (New Symptoms.)

BY J. W. IRWIN, M. D.

Mr. B., aged fifty, a merchant by occupation, in the latter part of February, 1884, while serving on a jury, discovered a soreness and some swelling near the margin of the anus. This swelling remained nearly stationary until the latter part of April following, when mild paroxysms of fever set in. The fever was not of long duration, as it yielded readily to the use of quinine. With the recurrence of fever the swelling began to enlarge, but it was not very painful and did not prevent him from attending to business until the 10th of May following, when he had to take to the bed. By this time the swelling had become very much enlarged and painful.

The previous history of the case is as follows: He had never been sick until in September, 1881, when, as Dr. Preston B. Scott has kindly informed me, he had an attack of perityphlitis that was quite severe and which kept him confined to the bed for upward of three weeks, since which time he had not been entirely well, but his ailment was ill-defined. Recovery took place very slowly, and six months had passed before he had regained enough strength to be considered well.

He had always led an active life, and could roll and lift heavy weights without becoming fatigued; but since the attack of perityphlitis he has had no desire to take active exercise. The pain and stiffness in the right iliac region remained more or less severe, and for several months past he had been unable on account soreness to stoop low enough to tie his shoes.

He did not think that he had been having fever, but when feeling badly he would experience some relief from the use of quinine. His skin had become slightly jaundiced during the past year. His appetite had been failing, but there was no apparent loss of flesh; the bowels had been acting regularly.

On examination a large tumor, red and painful, was discovered over the right ischium extending into the ischio-rectal fossa toward the margin of the anus of the corresponding side. The tumor was oval in outline, its long diameter reaching from before backward. It had all the appearances of an acute abscess, but pus could not be detected and emollient poultices were applied.

The bowels were tympanitic, and some tenderness under pressure was complained of in the right iliac region; but no tumor was detected. On the 17th of May, nearly a pint and a half of grayish-brown pus, holding in suspension numerous particles of black granular matter, was evacuated by the knife. The pus had no fecal odor, but the odor was otherwise extemely offensive. The same evening an ounce or more of a reddish-brown colored substance, very much resembling finely chopped up liver, came from the wound. The flow of pus continued to be very abundant, and fully a pint was discharged daily for the next four days. The relief from pain that usually follows the opening of abscesses was not experienced in this case, and on the 21st day of May it was decided to enlarge the opening and thus secure a better outlet for the copious flow of pus, in the hope of obtaining the desired result. Chloroform was administered, and the wound was enlarged. On exploring the cavity with the index finger, an opening was found extending upward

*Read June 19, 1884.

close to the inner border of the ischium. Some relief followed this operation, but not as much as one would expect to see after such a procedure. The pain still continued to be quite severe.

Pus flowed freely for a couple of weeks, the character of which did not materially change, but the quantity lessened.

At this writing, June 17th, the pus has a healthier appearance and the quantity discharged does not exceed one ounce daily. The tenderness referred to in the iliac region has entirely disappeared.

The patient is now sitting up and able to take some exercise in the open air; his strength and flesh are slowly returning.

Singular symptoms observed in this case, and not hitherto mentioned, were a *tickling* sensation in the nose and frontal sinuses, which gave rise to obstinate attacks of *sneezing*, accompanied by a racking frontal *headache* that would last for an hour or longer at a time. This annoyance was so great that the aid of physicians, including a specialist, was sought in the hope of obtaining at least relief, but without avail.

Examination of the nose and throat failed to discover the cause of the trouble, and those parts were said to be entirely healthy. These symptoms first made their appearance soon after the attack of perityphlitis, and had been occurring at short intervals up to the time of the opening of the abscess, but since the abscess has been discharging the patient has experienced no further annoyance.

The odd symptoms referred to in this case are new, and, so far as I know, no allusion has hitherto been made to them as occurring in such diseases. The literature on sub-peritoneal and perityphlitic abscesses fails to mention them.

A singular case has been reported by Dr. Quain, of London, "in which there existed a certain subjective sensation of smell; a fecal odor, which could not be recognized by others, being continuously complained of by the patient to the extent of its being almost regarded as a monomania. This smell gave the patient no further annoyance after the abscess had discharged and subsequently healed."

DISCUSSION.

Dr. PRESTON B. SCOTT was the first to make remarks. He said he felt called on to follow the reader in his very interesting report, having been connected with the case throughout its course. When he first saw the case, nearly three years ago, it was distinctly an acute cellulitis about the caput coli, caused by catarrhal agency. It was severe and alarming, and ran the course of similar cases of perityphlitis, appearing to terminate by resolution in five or six weeks. Until called in to recognize the ischio-rectal abscess, at the end of nearly three years, he had seen nothing to awaken suspicion of insidious suppuration beyond the soreness and stiffness frequently complained of in such cases for some time after the acute symptoms have passed away.

It is certainly worthy of note that there was no loss of flesh and never any irritative fever, nor was he at any time so disabled as not to follow his business.

The olfactory irritation was severe and distressing; it gave the patient much annoyance. The specialist who made the examination of the patient's nose and throat had informed him that he was unable to detect any signs of disease in those parts. He concurred with the reader in believing it of reflex origin. He had not seen a similar occurrence.

In view of this new feature, and of the insidiousness of the suppuration, the case was exceedingly interesting. Not less so was one case he had seen before the days of aspiration. It was similar in its occurrence from cold, in a healthy young man. A severe and fatal perityphlitis ran its course in about six weeks, when irregular rigors and high fever, followed by profuse sweating, marking the usual termination by suppuration. As early as the seat of the abscess could be recognized, an incision was made in the lumbar region, but not until the burrowing of the pus had proceeded behind the walls of the diaphragm, through the tissues, into the right lung. This was one instance where pus had ascended against gravity.

Dr. CLEMENS: What position was the patient in during all this time that the pus was finding its way upward?

Dr. SCOTT: He was all the time confined to the bed.

Dr. CLEMENS: Then that will account for the pus finding its way upward.

Dr. SCOTT went on to say, another more recent case pointed and was opened above Poupart's ligament, with recovery. In this connection an interesting question arose in an examination for life insurance. The applicant, a patient, had, three years ago, a severe catarrhal pelvic cellulitis on the left side, and recovery took place by resolution.

While he has since been in uninterrupted good health, he feels sensitive to change of weather, and, at long intervals, the part is slightly tender under deep pressure. The inflammation being sub-peritoneal, and not appearing sufficient to justify any suspicion of insidious suppuration, he was recommended and accepted for life-insurance.

He had never before observed a case having the insidious course as the one just reported by Dr. Irwin. He regarded it as unique for an abscess to have remained for so long a time, nearly three years, pent up in the system without showing any sign of hectic fever. He had always believed that abscesses gave rise to irritative fever and unmistakable constitutional disturbances.

Still, the lesson of this case is very instructive in showing how long suppuration may be delayed, and the value of reflex symptoms in diagnosis.

Dr. DUDLEY S. REYNOLDS said: The history of this case is very strongly marked as one of continued progress from the local inflammation at the cecum to the pointing and opening of the abscess in the ischio-rectal fossa. The absence of fecal odor in the matter is not worthy of note. The extraordinary feature is, that the continued abdominal soreness, in moving about, with the pelvic pain occasionally complained of, and the final addition of dryness and constant irritation in the throat and nasal membrane should have been so constant and so well marked, the patient finally suffering much from sneezing, which ceased promptly on the evacuation of the abscess. In women with inflammation of the cervix uteri, and especially such as suffer uterine flexions, the disturbed voice, the dry throat, sometimes with troublesome cough and frequent burning sensation in the nose, are phenomena well known to both the gynecologist and the laryngologist.

I have noticed in men and women who have hemorrhoids, that as soon as constipation of the bowel comes on the nasal passages are dry, or suffer burning sensations, the pharynx is dry, the larynx feels constantly irritated, and cough coming on they seek the advice of a practitioner who treats nasal and throat diseases.

The explanation is clear when we consider the course and termination of the great splanchnic nerve, which is distributed abundantly to the pelvic organs. The anterior fibers in the male go to the walls of the rectum, the prostrate gland, and the bladder. Superiorly these fibers terminate in the lining of the nose and throat, anastomosing with filaments from the cerebro-spinal system at both extremities.

It is easy to understand that, in the case reported, some foreign substance found its way through the walls of the cecum, or its appendage, and, by gravitation, slowly worked its way down between the muscular walls of the intestine and its peritoneal covering, maintaining in its course by the rectum enough irritation in the branches of the great splanchnic to cause all the symptoms, for the relief of which a specialist was consulted. The terribly offensive character of the matter let out, and the appearances of it, with black granular pigment, followed afterward by pus, strongly support the theory I have expressed.

Dr. REYNOLDS wished to know if the pus had been subjected to a microscopical examination.

Dr. IRWIN replied that it had not.

Dr. REYNOLDS went on to say that he could not well account for the pigment, but thought it may have been due to traumatism. The patient may have swallowed a pin or cherry-stones, or again, hardened particles of feces may have found their way into the cecum and penetrated its walls, thus giving rise to the abscess and constituting the pigment in the pus. There was only one condition of the parts that he was aware of would give rise to such pigment, namely, melanotic tumors of the pelvis. This he did not believe existed.

Dr. BAILEY would be inclined to doubt the connection, in the present case, with the perityphlitis, and neither would he refer every attack of sneezing to the gut. He thought it a coincidence. The case just reported was new and very interesting, and he regretted that its diagnosis had not been discussed by the writer.

Dr. CLEMENS had seen at least half a dozen cases in his practice, but never observed the symptoms mentioned by Dr. Irwin. The subject under discussion was very interesting to him. He had always thought such abscesses were due to foreign substances. He went on to say that he had had a case in a boy aged eleven years, which was caused by a number of small seeds getting into the cecum. He thought the impaction was favored by the fact that the boy had been running and jumping violently immediately preceding the attack.

Dr. O'REILLY: I would have preferred that Dr. Irwin had given the case some other name than sub-peritoneal abscess. Had he said perityphlitic abscess, I should have taken occasion to review the literature on the subject. The new symptoms mentioned he had never seen or heard of before, but thought that such reflex disturbances could exist. He did not believe that, as Dr. Reynolds had stated, the reflex disturbance could only be through the great ganglionic nervous system. He thought that such symptoms could take place through the cerebro-spinal system just as well. Standing on a cold floor barefooted would give rise to attacks of sneezing. He would have liked it very much if Dr. Irwin had discussed the differential diagnosis, as the disease might have been due to several causes. Injections into the bowel, the water or nozzle of the syringe finding its way through the coats of the bowel into the cellular tissue, would give rise to abscesses.

Dr. VON DONHOFF said that sneezing often followed severe hemorrhages, as he had seen it occur in a number of instances. He had no doubt but almost any kind of reflex symptom could be produced by the ganglionic nervous system. He did not believe with Dr. Reynolds in regard to the cause of the pigment, as it was always due to the vascularity of the part. In the case reported it may have been blood.

The paper was further discussed, and the new symptoms commented upon by the president, Dr. Leber, Dr. Clemens, Dr. Reynolds, and Dr. Scott.

Dr. IRWIN, in closing the discussion, was pleased to see the Society take so much interest in the report of the case. He had profited by the remarks. Some years ago a patient having the nose symptoms came under his observation that two years previously had had typhoid fever in which the abdomen and ascending division of the colon were much distended with gas. He prescribed saline laxatives and tonics for the patient, and recovery took place. About one year ago, while on a visit in Louisville, his attention was called to the case of Mr. B., and, remembering his former experience, he examined the abdomen and found the colon distended with gas. Mr. B. also complained of acidity of the stomach and eructations. Much the same course of treatment as referred to was prescribed, but the relief that followed was only very slight and temporary.

Dr. IRWIN went on to discuss the diagnosis, saying that he had given the abscess the title of "sub-peritoneal" because he believed it was external to and beneath the peritoneum. It will be remembered that there was very little fever or constitutional disturbance, while the quantity of pus discharged amounted to a gallon or more. Had the peritoneum been involved in the morbid process, either by an acute or chronic form of inflammation, much more fever and constitutional disturbance would have resulted. Particular pains had been taken to notice the odor of the pus, which was found to be very offensive, but no fecal odor could be discovered. This, he believed, would exclude the idea of any communication existing between the abscess and the inner side of either the cecum or the rectum. He had no doubt of the abscess being connected with the initial attack of perityphlitis, perhaps it might have been an extension of the inflammation to the cellular tissue in the right iliac fossa. He did not believe that the abscess had become suddenly developed from an insidious inflammation which had been going on in the parts, as the quantity of pus could not have formed in so short a time. It was most probable that the abscess (at first not very large) had formed in the iliac fossa at the time of, or soon after, the acute attack of perityphlitis; became encapsuled, remained for a time stationary, and under a favorable state of the system was liberated; then finally burrowing its way downward and out through the floor of the pelvis. The pigment in the pus he thought was blood that had escaped from some small veins, which had ruptured during the inflammatory process. He concurred in the opinions expressed by Drs. Reynolds and Von Donhoff as to the manner in which the reflex symptoms were produced.

PHILADELPHIA CLINICAL SOCIETY.

The President, Dr. Henry Beates, jr. in the chair.

Dr. G. BETTON MASSEY read a paper on

TRAUMATIC SCIATICA,

And its relation to *hip injuries*. Details of six cases were related, in the majority of which the sciatica had been overlooked, while attention was directed to a search for osseous injury. In the first case he was called in consultation to see an aged gen-

tleman who had fallen on an icy spot of pavement eleven days previously. In falling he struck heavily on the left hip, and it was with difficulty that he arose and walked home, a distance of four and a half blocks. His family doctor, a prominent physician and an expert diagnostician, when called in searched diligently for fracture but could find none, notwithstanding the evident helplessness of the limb and the attacks of excruciating pain that was made worse by movement. At the time he was called in, the physician had about concluded that the pain must be imaginary. On examination the absence of any kind of fracture was apparent. The patient could lift the limb but a few inches from the bed. He was suffering from continuous and severe pain, felt most at points corresponding to the sacro-iliac notch of the affected side, the rear of the head of the fibula, and the rear of the external malleolus. The pain was aggravated by any movement, but especially by flexion of the thigh and extension of the leg. It was clearly a case of sciatica caused by contusion of the nerve in falling.

At the request of the medical attendant the reader of the paper joined him in the care of the case, and applied the continuous descending galvanic current to the affected nerve, ending each sitting with a series of muscle-contracting interruptions of the current, great gentleness being required at first to avoid aggravating the pain temporarily. Good effect was manifest after the first visit, and eleven applications sufficed to establish a complete cure—recent careful inspection failing to detect either awkwardness of gait or atrophy of the posterior muscles.

Case II was that of a German woman, aged seventy-three. On the 15th of January, 1883, she fell on the ice, fracturing the neck of the femur outside the capsular ligament. After being totally neglected for two weeks, a member of the family asked the reader of the paper to take charge of the case. He found the limb one and a fourth inches shorter than its fellow and greatly everted. At the seat of injury the great trochanter was lost in an abundant deposit of callus. No crepitus could be found. Great pain existed throughout the distribution of the large sciatic nerve, being especially felt in the peroneal and posterior tibial branches. Considering the age of the patient and the attempt at union already made by unaided nature, it was deemed unwise to interfere with the broken bone, so remedial efforts were entirely directed toward the relief of the sciatica. A series of blisters were directed; chloroform injections made; various stimulating and anodyne liniments applied, together with the internal administration of opiates and sedatives, but he felt bound to say the case seemed slowly to improve without being affected by any of these remedies. Electricity was not used, as the patient was too far from the office to make it possible to apply it with sufficient frequency, and the friends declined to have her removed to a hospital. The pain continued over a year in gradually decreasing severity, and, though the patient has now been able to walk with crutches for some months, there is much atrophy of the muscles supplied by this nerve.

The remaining four cases were selected from the large number of cases of sciatica treated by the writer at the electric clinics of the Orthopedic Hospital and Infirmary for Nervous Diseases.

Case III. A healthy hod-carrier was sent from Dr. Wharton Sinkler's clinic, November 16, 1881. Seven weeks before, while carrying his usual burden up a ladder, the right foot slipped on a stick and threw the thigh into extreme flexion. He immediately felt an acute pain at the point of emergence of the sciatic, and following that nerve down the thigh into the peroneal. It was sharp and pricking in character, and had remained continuously present since the accident, being worse at night. He was unable to walk more than a block at a time, and presented a gait markedly characteristic of sciatica. No atrophy was found. He was placed upon static electricity, positive sparks being drawn from the painful points and course of the nerve. After the fifth application it is noted that he was much better; after the twelfth, that he walks three miles to the hospital, and after the twenty-second application he was discharged cured.

Case IV. A carpenter, aged sixty-eight, was sent from Dr. Sinkler's clinic September 29, 1880. A healthy man eight months before admission, he fell on the ice, striking the hip. He was compelled to remain in bed six weeks, suffering from pain in the region of the small and great sciatics. His physician was uncertain whether fracture was present or not. On examination the gluteal and flexor mucles of right leg were found much atrophied. He complained of great pain in the course of right sciatic to knee, and also in the distribution of the external popliteal; at times felt some pain in

left leg. He was placed on the constant galvanic current thrice weekly. At the end of forty-two applications he is noted as entirely well.

CASE V. A man, aged forty, was sent from Dr. S. Weir Mitchell's clinic May 6, 1881. Four months before he had fallen and dislocated his right hip. This was reduced shortly afterward, and he remained in hospital eleven weeks, during which time and up to his appearance at the clinic he suffered much pain throughout the sciatic distribution of that side. There was considerable atrophy of the buttock and limb —a difference of one and a quarter inches being found six inches below the trochanters. He was placed upon five grain doses of potass. iodide and the constant current thrice weekly. After thirty-five applications of the battery and considerable quantities of the iodide, it was found that the pain had ceased, but that some atrophy remained.

CASE VI. A porter, aged thirty-nine, was sent from Dr. Mitchell's clinic June 30, 1881. Fifteen months before he had been crushed between a platform and a moving car, fracturing the pelvis on the right side. At his first appearance at the clinic some crepitus was still present, and there was two inches shortening of the right leg. He complained of much pain in the region of the sciatic nerve of the right side, which was increased by motion and exercise. He had been blistered and was taking five-grain doses of the iodide when sent to the electrical clinic. After twelve applications of galvanism, with some benefit, the summer vacation compelled a discontinuance, and he did not reappear in the autumn.

The obvious conclusions to be drawn from these cases were stated, as follows:

1. Surgeons called to cases of hip contusion or suspected fracture should not fail to search for evidences of injury to the delicate nervous structures here situated.

2. If such evidences of nerve injury are found, prompt and energetic measures of relief are indicated, the importance of which is emphasized by the complete and rapid recovery of the two cases which were treated early.

3. Of the four remaining cases one was distinctly benefited and two cured by more or less long-continued (one to five months) galvanic treatment. The fourth did not receive galvanic treatment and was fully a year in duration.

Dr. E. E. MONTGOMERY inquired how many cells had been used in the treatment. He thought that, considering the usual obstinacy of the class to which the cases related belonged, due to the inflammation of the sheath of the nerve, the treatment had been satisfactory.

Dr. L. BREWER HALL related the details of a case similar to those described, which had been caused in a lady by a fall from horseback, alighting on the seat. The pelvis was fractured and a long-continued sciatica supervened.

Dr. MASSEY, in closing the discussion, said that the number of cells used varied from twenty or thirty to fifty, the kind being the gravity cell, which, owing to great internal resistance and the nature of the elements used, did not furnish as much current per cell as the zinc and carbon batteries charged with acid. The number used was largely regulated by the varying resistance of the skins of different individuals, some skins permitting a free flow of the current while others presented an almost insurmountable obstacle. It is to be regretted that the inventors have not as yet presented us with an instrument that will conveniently inform the operator of the true amount of electricity passing at a given moment. An approximation, however, to accurate dosage may be made by including a galvanometer in the circuit or even by observing the sensations of the patient. Since the date of these cases he had used the static form of electricity in many cases of ordinary sciatica and found it at times equally efficacious as galvanism as well as more convenient.

Dr. DU BOIS called attention to the value of *bals. peru* as an application for *fissured nipples*. It should be applied after nursing, about four times daily.

Dr. HALL, on behalf of the Committee on Microscopy, presented an improved clinical microscope, which combined all the features of a clinical with those of an ordinary table stand.

PARALDEHYDE IN SLEEPLESSNESS.—Of the new hypnotic the Medical Press says: Paraldehyde is claiming the attention of the profession, as in some respects it is superior to chloral, as it is very safe to give in simple sleeplessness, and leaves no unpleasant after-effects. However, it is of no use where insomnolency is the result of pain. It is given in the following formula:

Paraldehyde,	ʒj;
Syrup of orange,	ʒj;
Water,	ʒj.

To be taken at bedtime.

Miscellany.

THE TRAVELER'S POCKET PHARMACY.—A contemporary for whose opinions we have in general great respect discourses in a timely manner on the hygiene of summer travel. There is certainly room for a caution of the traveling public as to impurities of drinking-water, and as to the importance of prompt and regular attention to the calls of nature during the vicissitudes of journeying. Attempts to popularize a knowledge of hygiene are not to be lightly discouraged. But there is a limit, we believe, to the drugs which it is wise to place in the grip-sack of the average summer tourist. The list which our contemporary suggests as comprising the "small stock" that travelers will do well to provide and carry for preventing illness is as follows:

"Seidlitz powders, cathartic pills, brandy, cholera-mixture, paregoric, aromatic spirits of ammonia, soda-mint, ginger, a few opium suppositories, quinine pills, and prepared mustard leaves."

Some of these drugs are tolerably active in their effects, and it is pleasant to know that the average traveler is so familiar with their therapeutic uses as to be able to employ them with precision and safety.

We have only to add that surgical casualties ought to be equally well provided for, and to suggest a similarly efficient armamentarium in that department. The prudent paterfamilias will do well to take in his valise a stomach-pump, a few catheters, some splints, an amputating knife and saw, etc. Possibly it would be well to add a *trephine* and a *tracheotomy tube*.

We regret to say that it appears that the English are not always to be similarly trusted in carrying about and administering active drugs. Just after writing the foregoing paragraph we chanced upon the report of evidence before a coroner's jury in England by which it appeared that one Josiah Haynes, an auctioneer, having gone on a journey one day with his housekeeper, Mrs. Todd, gave her at the Victoria Park Station, as she was feeling ill, a "calomel" powder, "telling her to take it at bedtime, as it would do her good." It appeared, moreover, that about four years ago Mr. Haynes, wishing to kill a dog, had purchased from a friend, a druggist in Somersetshire, some strychnia, some of which he gave to the dog and killed it, while the remainder was put away in a box. A few days before the day in question, while turning over some papers, he accidentally came across it, and put it in his waistcoat pocket for safety. On reading an account of the case in the papers he felt in his pocket for the strychnia and found it gone, while the calomel powders were still there. Mrs. Todd had passed the "calomel" along to her father, wishing also to do him good. The parent unfortunately died of strychnia poisoning. The jury censured Haynes.—*Boston Medical and Surgical Journal.*

ARSENIC DIFFUSED THROUGH THE DEAD BODY.—The Weekly Drug News says that Victor C. Vaughan, M. D., and James H. Dawson, Ph. C., have made experiments (abstract from Contributions from Chemical Laboratory, University of Michigan) with the view of determining whether or not arsenious oxide (common white arsenic) would diffuse through the body after it had been mixed with water and injected into the mouth or rectum after death, this having been the most important question which arose in a murder case tried in Michigan within the past year. They concluded, from experiments on dead bodies, that arsenic is widely diffused through the body when introduced after death, and that, therefore, in a case of suspected arsenical poisoning, if arsenic had been introduced into the body after death, the finding of the poison in the various organs is no proof that the arsenic was introduced during life and was the cause of death. Arsenical embalming fluids may, according to the above, be used as a means of covering up crime, and this fact should be borne in mind in cases of supposed poisoning by arsenic.—*Boston Medical and Surgical Journal.*

AN ECONOMICAL BATTERY.—The announcement of an electric battery which yields residual products of more value than that of the original materials used would appear to solve one of the most difficult problems. The Lalande battery is described as being formed of a series of cells, each one consisting of an iron tray containing oxide of copper, over which, but not in contact with it, is a zinc plate, the remainder of the tray being filled with solution of caustic soda. After the battery is exhausted, the zinc oxide can be recovered from the soda solution, and is estimated to be worth 25 per cent more than the metallic zinc from which it is produced, while the copper oxide can be regenerated at a small cost. The

first practical application of the battery was in the production of oxide of zinc more cheaply than by the ordinary process.—*Medical Press.*

COLLAPSE OF THE MACKEREL SCARE.—Professor Huxley performed a good work when he wrote the letter to which publication has been given, and in which he directly declared that no kind or number of parasites found in mackerel, even though swallowed alive by human beings, would produce an injurious effect. Professor Cobbold also has testified in the same direction in his lectures on parasites at the Health Exhibition; and it is to be supposed that the emphatic contradiction given to an absurd report respecting the evil effects likely to follow on eating parasite-infected mackerel, by these two eminent naturalists and medical men, will have the result of reassuring the public and restoring confidence in an important article of food. Whoever is responsible for first circulating the misleading notice as to infected mackerel was either the subject of a delusion or was an intentional misleader; but in any case, it temporarily prevented the employment of a large quantity of fish as food by the poorer classes, and by those especially who can ill afford to lose any opportunity of obtaining at the cheapest rate possible a wholesome and nutritious meal.—*Ibid.*

CHOLERA.—A dispatch from Marseilles states that there were thirty-two deaths on the night of the 13th and four on the morning of the 14th inst. In Toulon there were eleven deaths on the 13th. This is about the average daily mortality. The sanitary condition of these cities is execrable, and if it were not for the fact that they have been deserted by all such inhabitants as could get away, the mortality would be far greater.

It is probable that the disease will become epidemic in Central and Western Europe, and that possibly America will know its visitation. In view of the danger it is pleasant to note that our Government is doing every thing in its power to bar out the invader, while it is to be hoped that our State and municipal Boards of Health will apply sanitary measures so thoroughly as to leave it little or no ground for a foothold should it be landed on our shores.

DR. P. CALVO (Journal of the British Dental Association) gives, as the results of experiments during the last three years, a remedy for lessening the sensibility of dentine of decayed teeth which does not injure the vitality of the pulp. This he has found in quicklime. By carefully drying the cavities of the teeth before inserting the powdered lime, an undue rise of temperature is avoided, in consequence of the hydration taking place slowly and but little heat being developed. Lime appears to have the advantage over the more soluble alkalies of coagulating the albumen of the immediate surface, and thus limiting its caustic action.—*Medical Press.*

THE Lancet of June 28th reports a death from bichloride of methylene. The victim was the daughter of Dr. J. H. Hammond, of Preston in Lancashire, who at the hands of Dr. Aveling, was about to undergo a slight operation for some small uterine trouble. The anesthetic was administered by Mr. Fenton Jones, according to Junker's method. *In less than three minutes, when only ten minims of the anesthetic had been used,* the heart suddenly ceased to beat and respiration stopped. All efforts at restoration proved unavailing. The heart and lungs had been pronounced healthy by four skillful medical men, among whom were Mr. Barwell and the lady's father.

TINCTURE ORANGE FRUIT.—Take fresh ripe oranges, two and one half pounds; alcohol, one pint; add water, two pints. Carefully grate the oranges so as to remove all the yellow portion of the peel but none of the bitter white. Squeeze out the juice, place the grated peel in a bottle, and pour over it the alcohol and juice. Let it macerate two or three days in a moderately warm place, filter, and add through filter the water. If cloudy, add a little alcohol. This gives a very finely flavored tincture, and mixed in above proportion forms a finely flavored elixir.—*Pharmaceut. Record.*

PROFESSOR RICORD—The admirers of this distinguished surgeon will be glad to know that he is still in the enjoyment of so much health and vigor that the *Almanach General de Medicine* for this year affixes four to eight o'clock as his consulting hours in the Rue de Tournon. He graduated on May 5, 1826.

No English medical work of recent date can be said to have achieved so great an amount of success as Quain's "Dictionary of Medicine," for, up to the present time,

it has had to be reprinted no less than nine times to meet the demand for it in this country alone. In America, also, it has met with an equal amount of favor, the publishers of it in that country having lately issued a *seventh* reprint of the work.—*Medical Press.*

DEATH FROM VACCINATION.—The Lancet records the death, at Sheffield, of a child seven weeks old, who, according to the death certificate, died of vaccination. The revelations of a coroner's inquest proved that some time after the vaccination symptoms of gout were manifested. The medical attendant swore that the lymph used was pure, and that the gout was hereditary. Impurity of the virus being suspected, the jury adjourned in order that a post-mortem examination might be made.

INJURED BY A FALLING WIRE.—A telephone wire connecting the North Staffordshire Infirmary with the offices of the various visiting surgeons of the district, broke on the 23d of June. (Lancet.) In its fall the wire struck the ground and rebounding and curling up caught a child five years of age, whom it lifted up and dashed to the ground with great violence. The child was found in an insensible state, and with one of its legs severely injured.

SIGNIFICANCE OF SCARS AND COPPER-COLORED SPOTS ON THE FOREHEAD.—Dr. T. Pershing, of Wilmington, Del., in commenting upon the statement of Dr. A. L. Ranney (New York Medical Record) that "ulcerations upon the forehead, not traumatic are syphilitic; scars and copper-colored spots are equally significant," says that herpes zoster occurring on the forehead may be severe enough to cause ulcerations.

A CANDIDATE for license to practice medicine in North Carolina (and, by the way, an unsuccessful candidate) when asked "who discovered vaccination?" replied "Virchcow."—*N. C. Med. Journal.*

[This reminds us of the backwood's candidate for a license to preach, who, in answering one of the questions, called Saint Paul a heathen philosopher.]

INCIDENTS of hospital life form the material from which a new comedy-drama, entitled "Sister Grace," has been constructed, and which was produced for the first time on Thursday last at the Royal Avenue Theater. The performance took place at a benefit *matinée*, the proceeds being devoted to the East London Hospital for Children, at Shadwell.—*Medical Press.*

AT the annual election of Fellows of the Royal Society, of London, on Wednesday last, the following members of the medical profession were, on the nomination of the Council, chosen for the distinction: Professor G. J. Allman, LL.D., Professor J. G. M'Kendrick, LL.D., Dr. Arthur Ransome, Professor C. S. Roy, and Professor Morrison Watson.—*Ibid.*

ANTIPYRIN is the name of a chinolin-derivative first used by Filehne, and recently experimented with by P. Guttmann. In doses of two grams it reduces the temperature powerfully, this reduction lasting five to six hours. It has no bad after-effects, and only very rarely disturbs the stomach.—*Medical Record.*

THE corrected proof of Volume V of the index catalogue of the library of the surgeon-general's office, beginning with "Flaccus" and ending with "Heart," has been returned to the printers by Dr. Billings, and the volume will be put to press at once.—*Maryland Medical Journal.*

Dr. H. KNAPP has recently made some important clinical observations on the use of jequirity in trachoma. His conclusions are that it is a quick, but not a safe remedy, and that at present its use ought to be restricted to cases of old and intractable pannus.

A DOCTOR DIES UNDER CHLOROFORM.—Dr. McRae, of Scotland, recently died in Edinburgh while taking chloroform prior to the proposed removal of a tumor at the nape of his neck. He was under the charge of Prof. Annandale, to whom he had gone for counsel.

SIR JAMES PAGET describes the pattern healthy man as "one who lives long and vigorously, who in every part of his life, wherever and whatever it may be, does the largest amount of the best work that he can, and when he dies leaves healthy offspring."

THE German Society of Physicians and Naturalists will be held in Magdeburg, from the 18th to the 23d of September. An attractive programme is announced.

The Louisville Medical News.

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H. A. COTTELL, M. D., - - - - - - - - Editor.

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THE EFFECTS OF ALCOHOL IN THE HOG.

The New York Medical Journal, of June 28th and July 5th, gives an interesting summary of an account (just published) of some extensive experiments performed in the *abattoirs* of Grenelle, Paris, on chronic alcohol-poisoning by M. Dujardin-Beaumetz. This observer subjected about twenty hogs, for a period of nearly three years, to daily dosing with small quantities of alcohol, mixed with their food. The symptoms observed during the life of the animals and, the post-mortem lesions are unfolded in a systematic manner, and reveal certain facts which, while serving as a solemn warning to the drunkard, will supply the temperance lecturers and tract-writers with fitting texts for many years to come.

As a solace to the moderate drinker, it was noted that "when the daily dose of alcohol did not exceed one gram (about a fourth of a teaspoonful) for each kilogram (about two pounds) of the animal's weight, the digestive system bore it with very little inconvenience." This, on the supposition that the hog and man are equally susceptible to alcoholic influence, would make it possible for a healthy human being, weighing one hundred and twenty pounds, to bear about two ounces of alcohol (or a gill of good whisky) daily, without material detriment to his economy. Since, however, the majority of men weigh from one hundred and forty to one hundred and eighty pounds, the average drinker might be able to increase his daily allowance by from one sixth to a half of a gill, while those favored mortals whose weight ranges from two hundred pounds upward would doubtless be able to take, without stretching, a quantity of whisky sufficient to meet the full demands of appetite.

When, however, the amount of spirit above named was exceeded, disturbances of digestion were in a few days invariably observed, such as loss of appetite, vomiting of bile and mucus, and diarrhea, the stools sometimes containing a mixture of mucus with sanguinolent matters. In some cases the poisoning took on an acute character, making it necessary to discontinue the alcohol and place the animals on a milk diet.

Post-mortem, the stomach showed abnormal redness; but vascular injection was limited to the mucous membrane, and no thickening of the walls of the stomach was observed. This would seem to damage the theory so warmly advocated (and illustrated by cheap diagrams) by some of our temperance workers, that scirrhus carcinoma is frequently caused by the habitual ingestion of liquor.

Hepatic disturbances were noted, the conjunctivæ being quite yellow in some of the hogs, and the urine tinged with bile; but there was neither hepatitis nor ascites, though, post-mortem, the organ was found congested, and in some instances the parenchyma was friable. It should be noted here, that the connective tissue frame-work of the swine's liver is more dense and resisting than that of men. That there should be no hepatitis, hob-nail liver or ascites, after a three-years' spree in these animals, may seem to be a source of comfort to such men as may be disposed to make hogs of themselves; but he who puts it to a practical test will probably suffer by the comparison, and help only to establish the hepatic superiority of the swine.

Although there was no hematuria in any

of these cases, one of the animals suffered from pyelitis, and fatty degeneration of the kidney was observed in every post-mortem. Here the man would seem to have the advantage, though it is alleged that fatty-kidney change is very common in hogs of unquestioned sobriety.

Almost all of the hogs had a cough during the experiment, and in some it was constant, the lungs showing, post-mortem, a marked congestion, which in a few instances had given rise to hemorrhages. This was perhaps due to the elimination of the alcohol by the lungs, though it should be noted that while the animals were drunk they remained immovable in their pens and became chilled, a condition which doubtless favored the development of broncho-pulmonary catarrh. Here the analogy holds.

Though the post-mortem failed to show any valvular lesions, the heart was invariably in a fatty condition, and in several cases atheromatous patches were seen at the root of the aorta. Hogs, the author says, are very liable to fatty heart under any kind of food, but atheroma was not observed in any of the temperate swine of the same age which were examined. The intoxicated animals, when living, became breathless upon the least exertion.

In the matter of brain disturbances occasioned by alcohol the man suffers markedly in comparison with the hog, for it was observed that the latter, soon after taking his potion, would invariably lie down and sleep off his drunk, and that though after the experiments had been continued for a number of months, muscular tremors were produced with weakness of the limbs, particularly of the posterior extremities, the animal never exhibited the delirium and fury of human drunkenness. The immunity of the hog from these disturbances is supposed to be due to the small size of his brain.

Nutrition seemed at first not to be much disturbed, the animals growing fat under their daily allowance of spirit, but whenever intestinal troubles supervened the appetite declined and emaciation followed. After a two-years' subjection to the alcoholic regimen all the animals became lean and continued to lose flesh, although a sufficiency of food was allowed them. Post-mortem, the muscular tissue was unhealthy in appearance, and intestinal hemorrhages were present in a number of the subjects. It will be seen that in the winding up of a dissolute life the hog presents a picture very like that of the human debauchee.

The last observation was that the degree of drunkenness and the seriousness of the lesions in the hog were, as often noted in man, determined largely by the quality or kind of spirit employed.

"Those animals to which the impure, coarse, unrectified products of the still were given showed the earliest, the most protracted, and the severest interference with their organs and functions. A hog that had unrectified grain spirit succumbed in less than two years; one that got beet whisky had pronounced congestion of the digestive tube, the liver, and the lungs, and atheroma of the aorta; and one that took potato spirit presented hepatic congestion of the most decided grade. On the contrary, those that were dosed with purified ethyl alcohol, potato spirit ten times rectified, or other rectified alcohols, showed few lesions or none at all. The hogs that were given essence of absinth showed a peculiar nervous excitation, tremors of the limbs, contractures, and cutaneous hyperesthesia—but a slight touch was needed to provoke violent spasms of the limbs."

While these experiments are of great physiological interest, it may be said that, aside from pretty clearly establishing that the hog can get on a chronic spree and suffer less damage to some of his viscera than does man under similar conditions, they serve only to confirm the conclusions long since reached by the medical profession in regard to alcohol after a long and serious study of its effects in man, namely, that it is a powerful drug, which forms at best a doubtful, always a dangerous, and usually a

damaging beverage; that it is best for people in health never to drink it; but that, if they would indulge in it without serious hurt, the liquor must be above suspicion as to purity, and taken in a quantity so small as not to heighten or depress any physiological function.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Editor Louisville Medical News:

Prof. Ball lately delivered a very interesting lecture, at his clinic at the Sainte-Anne Asylum, on the abuse of morphia, or rather on morphiomania, which he considers a new or artificial malady due to the excessive use of morphia in hypodermic injections, and which he attributes to its introduction by an English physician, Dr. Wood. Prof. Ball stated that the use of morphia in this form is very prevalent in the higher classes of society, these injections producing a delicious state of intoxication. The abuse of morphia, according to Dr. Ball, affects not only the mind and the intelligence but also the body. It reduces the subjects of both sexes to a complete state of impotence. The patient loses his appetite and can not sleep, he ages rapidly; mentally, the morphiomaniac has no will of his own, he is without any energy, he falls into a state of marasmus, and ends by poisoning himself or by dying suddenly. Colored drawings were hung on the walls of the amphitheater representing cerebral lesions caused by the ravages committed by morphinism. Attention was directed to the curious fact that while the abuse of morphia is so detrimental to the health, abstinence from its use after a long continuance of its employment is also very dangerous. Here the physician will find himself in a fearful dilemma. The only remedy in such a case would be gradually to diminish the dose until the patient is completely weaned.

As a demonstration of the subject in point, a female patient was brought into the amphitheater, carried on a chair, and presented a most pitiable object, a victim of morphinism. She was then fully under the influence of morphia, almost insensible, with a vague expression about the eyes, in fact, she was in a state of torpor bordering upon coma. Dr. Ball injected her with morphia, and the effects of actual enjoyment were manifest in the patient, who seemed to be restored to life and health again.

There is an old saying that every evil or disease has its remedy, which may be found every where in nature. For instance, the guaco grows in forests infested with venomous snakes, the cinchona abounds on the plains of America which are decimated by intermittent fever. Ague prevails in many countries where the cinchona does not grow; there, however, the lemon-tree is to be met with, the fruit of which, according to Dr. Charles Maglieri, an Italian physician, has been found to be a powerful remedy against intermittent fever. Dr. Maglieri employed the lemon against the intermittent fevers so prevalent in the Roman provinces, the knowledge of which, as a particular remedy in such cases, he acquired from the peasants in the south of Italy. The following is the mode in which the lemon was administered by the peasants:

A fresh lemon cut in thin slices, without being expressed, is boiled in an earthen vessel containing about three tumblers of water. This is boiled down to a third, then the pieces of lemon are pressed through a piece of muslin so as to have all the juice expressed, which the patients are then made to drink. From his own experience Dr. Maglieri has obtained such good results that he considers the lemon as much a specific for malarial fevers as quinine is reputed to be, and in a paper on the subject, in an Italian journal called *La Salute*, he publishes the following conclusions:

(1) The decoction of lemon employed in malarial affections produces results equal to if not superior to those of quinine. (2) It even acts in cases where quinine has been found inactive, as in certain forms of miasmatic fevers. (3) It is employed with advantage in chronic malarious affections. (4) It has none of the inconveniences of sulphate of quinine. It does not irritate the mucous membranes, nor does it produce ringing in the ears. (5) Its administration is possible in cases where the patient is afflicted with catarrh of the digestive tube.

Prof. Semmola, of Naples, has for a long time employed lemon juice for the cure of intermittent fever. He gives it with glycerine, which makes a delicious lemonade, and the glycerine, according to the professor, adds to the efficacy of the lemon juice.

Dr. Laborde read a paper for M. Vigier,

a well-known chemist, at the last meeting of the Societe de Biologie, on a new substance with which he proposes to replace carbolic acid. It is, according to M. Vigier, a "sulpho-conjugate," which he designates under the name of "sulfo-carbol," or which he considers is better expressed by the name of the unpronounceable term "*acide orthoxyphenylsulfureux*," a term already adopted in chemical works. The advantages claimed by M. Vigier over carbolic acid are: (1) The sulpho-carbol is almost absolutely deprived of toxicity. Dogs and other animals have been able to absorb several grams without an accident. (2) It possesses very strong anti-putrid and anti-fermentescible properties, as was proved by the employment of solutions of different strengths (from one to ten per cent) on wounds of an unhealthy character, on tissues in a state of putrefaction, etc. These solutions equally arrested fermentation, particularly diastasic fermentations, which does not take place with carbolic acid. (3) Sulpho-carbol is more soluble than salicylic acid, its odor is less penetrating than that of carbolic acid.

You will have learned by the newspapers and cablegrams of the outbreak of an epidemic of cholera at Toulon, which has caused a great panic, not only among the inhabitants but the authorities of all departments are up in arms against the dire enemy. Dr. Fauvel, member of the Paris Council of Hygiene, who was requested to keep the government informed of the progress of the disease, made a communication to the effect that, from the official reports he had received, the affection prevailing in that town was none other than sporadic cholera. In his report the learned doctor gives the following differential characters of Asiatic and sporadic cholera:

The former when once introduced among a conglomeration of individuals strikes like lightning, and extends most rapidly, to become extinct in a very short time. It is, generally speaking, imported, whereas the cholera nostras is simply due to local causes, not having any tendency to propagate itself, and is extinguished by the disappearance of the causes which engendered the malady, Dr. Fauvel moreover stated that the sanitary condition of Toulon is so notoriously bad that it was only a wonder that the affection now prevailing there does not reign permanently in that town, for, beside the population proper, which numbers about seventy or eighty thousand, there are twenty-five thousand soldiers lodged in barracks under the most unfavorable conditions. The disease which broke out at Toulon about a week ago is already almost extinct, and does not appear to have extended beyond that town, although one or two cases are said to have occurred at Marseilles. The news of the epidemic of Toulon has naturally caused a great sensation all over the country and the authorities in Paris are devising plans as to the best means for keeping out the disease. The chloride of zinc and carbolic acid are in great requisition, which are directed to be employed in the hospitals and public latrines. Instructions for the guidance of the people are being posted up, and the prefect of police has given notice that ambulance carriages are reserved exclusively for the conveyance of patients affected with the malady, and that medicine chests will be found at the police stations for the benefit of the public.

But the medical men at Toulon are still divided as to the origin or real nature of the malady prevailing there. Some good, however, has resulted from the epidemic, for ever since its outbreak a brigade of sweepers are to be seen daily sweeping the streets, much to the amusement of the inhabitants, who are not in the habit of witnessing such a necessary process in their much-neglected town. From latest telegrams the epidemic would seem to be on the decline. The mortality from the commencement of the outbreak on the 19th inst. has been about forty or fifty in all. The daily admissions into the hospitals are fewer and the malady is assuming a less virulent character.

PARIS, June 27, 1884.

PRESERVATION OF MEAT BY BINIODIDE OF MERCURY.—At a recent meeting of the Société Francaise d'Hygiène, Dr. de Pietra Santa read a communication on Means for Preserving Meat. On injecting a rabbit with a solution containing two milligrams of biniodide of mercury, and a sheep with a solution of five milligrams, the meat was found in a perfect state of preservation at the end of several months. Dr. de Pietra Santa does not believe that this mode of preservation would meet the approval of the Council of Hygiene, but he merely brought the fact to the notice of the Society as a curiosity, that the members might make use of it if they thought fit.—*Lancet.*

Selections.

ON THE TREATMENT OF DIARRHEA.—Sir Joseph Fayrer, in a recent clinical lecture (British Medical Journal), says: It is needless to occupy your time by describing the treatment of ordinary diarrhea; but I would again refer to the importance of checking all forms of diarrhea during cholera seasons, or when that disease is prevalent.

The commencement of chronic diarrhea is insidious, and the disease often gains ground before radical measures are resorted to for its removal. In the cases that come under notice at home, the most essential step toward recovery has been taken by the patient returning to Europe; but there remains much to be done to further the improvement, which may probably have advanced considerably during the sea-voyage.

The successful treatment of chronic diarrhea depends very much on the patient's resolution and perseverance in carrying out the instructions he receives. Diet is the most important element in it, and this must be strictly regulated; all irritating or indigestible and solid food must be at first entirely prohibited, and only that which is most easily assimilated allowed. Milk, alone or in some cases diluted with about one fourth or one third part of lime-water, given in small quantities and at frequent intervals—say, a wineglassful or small tumblerful every hour, or second or third hour, in some cases more frequently—will generally be found to answer, and may be continued for a long time, to the exclusion of all other food, with great advantage. Milk undiluted will not always agree (but I must say that, after considerable experience, I have very rarely found it to disagree), as may be seen by its causing irritation, and the passage of undigested casein; but it is quite sufficient for nutrition, and by the time the patient finds that he is taking three to four quarts a day, he will have realized that he obtains from it all that is needed to support health and strength. At first he may lose weight, but soon regains and increases it. Beef tea, raw beef juice, or other plain animal broth free from extraneous matters, or finely minced fresh meat; a raw egg beaten up with milk, to which a teaspoonful of brandy may be added, will sometimes, but very rarely, be tolerated (though I seldom find that they agree, and have to be discontinued). Arrow-root, tapioca, or other plain farinaceous food will sometimes, but not always, answer, certainly not at first. Tea and coffee as a general rule disagree, and should be avoided. Stimulants, especially for those who have long been habituated to their use, may be needed; the best are a little whisky or brandy diluted with Vals or Vichy or potash-water, but these should be laid aside if they increase the action of the bowels. A little good port wine may be tried; but as a general rule I find all wines unsuitable. The return to ordinary diet must be very gradual and tentative. Regularity in the times of administration and in the quantity of nourishment given is most essential. The greatest care should be taken not to give too much of any thing at a time, and at once to discontinue whatever appears to disagree.

It is necessary that the patient should be kept warm and at an equable temperature day and night. The body should be covered with flannel or woolen material next the skin, and a flannel bandage should surround the abdomen. Chills and damp are especially to be avoided, for exposure to them may seriously aggravate the mischief. During cold weather the patient should not leave the house.

As the condition improves, the state of the tongue is the best indication of recovery; the glazed red appearance is replaced by the reappearance of papillæ. This discipline may then be relaxed, and gradually the patient may be allowed to go out and take moderate exercise; but, until considerable improvement has taken place, he should be extremely careful in this respect. It is desirable to keep much in the recumbent posture, as mechanical rest for the bowels is a most important element in the treatment. It might be well, if possible, for the patient to reside during the cold months of the year in some of the milder and more sheltered parts of the country, and, perhaps, near the seaside of the south coast. The care, attention, comforts, nursing, and good food of a home, however, are more important than any benefit to be gained from such changes as may be derived from removal to different localities in the United Kingdom, where home advantages might be wanting. As the diarrhea diminishes, the condition of the excreta improves (the dejections diminishing in number but being copious in quantity, occurring once or twice in the day, semi-solid or pultaceous, gradually increasing in consistency, and not unfrequently constipation resulting, which requires ene-

mata or castor oil for its removal), and strength is regained, the diet may be more varied and out-of-door exercise more freely taken.

But, long after recovery is apparently complete, the greatest care must be taken to avoid errors in diet, over-fatigue (rest in the recumbent posture is desirable to give rest to the intestines), or exposure to extremes of temperature, or a relapse may take place. It is desirable that the stay in Europe should be prolonged, especially after recovery from severe attacks, beyond one hot season at least, and it may be necessary to defer return to India for another year.

Drugs will do little good if strict dietetic and hygienic rules be not most carefully and continuously observed. Under the impression—derived chiefly from the appearance of the evacuations—that the liver is mainly at fault, it is sometimes deemed expedient to administer cholagogues or alteratives. This, I think, is unnecessary, as there is not sufficient ground for supposing that the liver is specially at fault. The chief indication is to restore the healthy functions of the bowel by giving it rest, to promote absorption and to delay the expulsion of its contents. This we may hope to effect by introducing only bland, unirritating, and nutrient fluids, by allaying irritation and checking excited action, and by administering such remedies as may tend to improve the general health.

To allay the irritable state of the bowels, the compound ipecacuanha powder, in combination with bismuth, quinine, and alkalies, may sometimes prove useful. Where the motions are fluid, copious, and frequent, tannin or gallic acid may be given in combination with Dover's powder. Sulphate of copper with opium has been recommended. Dilute nitric and hydrochloric acids, in combination with opium, have been found beneficial where other remedies have failed. Nitrate of silver is sometimes given, but I have not found it to produce any satisfactory results. As a general rule all drugs are useless. Counter-irritation over the abdomen by sinapisms or turpentine stupes may be useful. Opiates and small demulcent injections are often efficacious in allaying the irritability of the bowel and giving rest. Hypodermic injections of morphia may be tried if opiates do not agree; but I have not found it necessary to resort to them. Opiates are sometimes objected to on account of their interference with the secretions; but this is, I believe, a groundless objection; the color of the evacuations need not prevent their use, and the rest and quiet they give may be of importance. Mucilaginous decoctions or infusions, such as those prepared from the fresh bale fruit, or from the isophgool (*Plantago Isophgoola*), the seeds of which are often given with good effect by the natives of India for the sake of the mucilaginous envelope, solution of gum, water-arrowroot, etc., may be beneficial for their soothing and nutrient properties.

In the earlier stages of the disease, where there is hepatic and portal congestion, ipecacuanha in large doses, ten to twenty grains, may cut short the state which would have passed into diarrhea. This, however, is quite inapplicable to the disease in its more developed stages. I have found some cases, which were aggravated by a state of portal congestion, improve rapidly after a few doses of a saline aperient.

As recovery progresses, preparations of quinine, iron, and other tonics are beneficial. A visit to some of the Continental health-resorts may be of advantage in expediting recovery, not so much for the sake of the waters, chalybeate or others, as for that important element in recovery from nearly all chronic diseases, "change," for the regulated and physiologically correct life, and the mental tone imparted by the determination to recover in a congenial place of residence.

The use of drugs will be modified by the peculiar circumstances of each case, but I think that, generally, the plan I have suggested will prove successful in cases that have not advanced too far. Where emaciation has made great progress, where the tongue is always red, smooth, and glazed, the mouth dry or aphthous, the diarrhea constant, and the exhaustion great, one can not but feel great anxiety and uncertainty as to the result, though it is seldom necessary to declare a case hopeless. The diarrhea may disappear in this condition, giving a delusive appearance of improvement, which is not unfrequently the precursor of death. Happily, a number of cases of chronic diarrhea of the character I have been describing have a favorable termination, and they are so in proportion to the care in which the patient adheres to the plan of treatment laid down for him; and I would emphatically repeat that strict adherence to simple milk for a long period, it may be for months, will generally prove of more value than medication of any kind.

FORMATION OF UREA.—The study of the physiology of urea is an unceasing one. MM. Grehant and Quinquaud have set to work again on the places of formation of urea in the economy. They have estimated several times the amount of urea in the blood going to and in that coming from the spleen and liver; the blood from the hepatic, splenic, and portal veins always contained more urea than arterial blood taken from the carotid arteries. From this they conclude that the abdominal viscera form urea. It is also added that arterial and venous blood from the limbs and head possess practically the same proportions of urea. Lymph and chyle collected from the thoracic duct after section of the medulla oblongata and the employment of artificial respiration have always been found to be richer in urea than arterial or venous blood.

THE N. Y. Charity Hospital has provided special wards for its phthisical patients.

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes of Stations and Duties of Medical Officers serving in the Medical Department of the United States Army, July 6, 1884, to July 12, 1884.

PROMOTIONS: To date from July 2, 1884. *Glover, Perin*, to be Assistant Surgeon-General, with rank of Colonel; *Smith, Andrew K.*, to be Surgeon, with rank of Lieutenant-Colonel; *Middleton, Passmore*, to be Surgeon, with rank of Major.

Clements, B. A., Major and Surgeon, also directed to relieve Surgeon J. P. Wright of his duties as Acting Medical Director, Department of the Missouri. (Par. 1, S. O. 138, Hdqrs. Department of Missouri, July 8, 1884.)

PROMOTIONS: To be Assistant Surgeon, with the rank of Captain, after five years' service, in accordance with the Act of Congress, June 23, 1874: Assistant Surgeon *John J. Kane*, June 3, 1884; Assistant Surgeon *John M. Banister*, June 3, 1884; Assistant Surgeon *Aaron H. Appel*, June 3, 1884; Assistant Surgeon *Charles Richard*, June 3, 1884; Assistant Surgeon *W. Fitzhugh Carter*, June 3, 1884.

Birmingham, H. P., First Lieutenant and Assistant Surgeon, from Fort Bayard, N. M., to Fort Bliss, Texas. (Par. 3, S. O. 137, Hdqrs. Department of Missouri, July 3, 1884.)

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE HOSPITAL SERVICE, April 1st to June 30, 1884.

Bailhache, P. H., Surgeon, detailed as Chairman of Board to examine candidates for appointment into the Revenue Marine Service, May 17, 1884. *Vansant, John*, Surgeon, to proceed to Empire City, Oregon, as Inspector, April 2, 1884. *Hutton, W. H. H.*, Surgeon, granted leave of absence for twenty-five days, May 14th and June 9, 1884. *Miller, T. W.*, Surgeon, granted leave of absence to attend the meeting of the American Medical Association, May 1, 1884. To proceed to Pittsburg, Pa., Ashtabula, Ohio, Buffalo, N. Y., and Detroit, Mich., as Inspector, May 10, 1884. *Wyman, Walter*, Surgeon, to proceed to Crisfield, Md., as Inspector, April 11, 1884. Detailed as President of Board for physical examination of candidates for appointment as Cadets in the Revenue Marine Service, May 20, 188. To examine cadet graduates Revenue Marine Service as to physical qualifications, May 31, 1884. Detailed as member of Commission to inspect United States buildings at quarantine station on the Delaware River, June 16, 1884. Detailed to represent the Marine Hospital Service as delegate to the American Medical Association, April 17, 1884. *Austin, H. W.*, Surgeon, granted leave of absence to attend the meeting of the American Medical Association, May 2, 1884. *Gassaway, J. M.*, Surgeon, when relieved by P. A. Surgeon Mead, to proceed to Portland, Maine, and assume charge of the Service, April 16, 1884. Granted leave of absence for thirty days, May 28, 1884. *Stoner, G. W.*, Passed Assistant Surgeon, when relieved by Surgeon Gassaway to proceed to Cairo, Ill., and assume charge of the Service, April 16, 1884. When relieved by Surgeon Gassaway to report in person to the Surgeon-General, June 20, 1884. *Irwin, Fairfax*, Past Assistant Surgeon, granted leave of absence for twenty-one days, June 19, 1884. *Mead, F. W.*, Passed Assistant Surgeon, when relieved by Assistant Surgeon Devan to proceed to Philadelphia, Pa., and assume charge of the Service, April 16, 1884. Detailed as Recorder of Board for physical examination of candidates for appointment as cadets in the Revenue Marine Service, May 20, 1884. *Carter, H. R.*, Passed Assistant Surgeon, to inspect unservicable property at the San Francisco Hospital, May 24, 1884. *Wheeler, W. A.*, Passed Assistant Surgeon, to inspect unservicable property at the Chicago Hospital, May 24, 1884. *Benson, J. A.*, Passed Assistant Surgeon, granted leave of absence for thirty days, April 14, 1884. When relieved by P. A. Surgeon Stoner, to report to him for temporary duty, May 19, 1884. *Banks, C. E.*, Passed Assistant Surgeon, detailed as member of Board to examine physically candidates for appointment into the Revenue Marine Service, May 17, 1884. To inspect unservicable property at Baltimore, Md., New York, N. Y., and Boston, Mass., May 26th and June 2, 1884. *Bennett, P. H.*, Assistant Surgeon, granted leave of absence for twenty days, June 28, 1884. *Devan, S. C.*, Assistant Surgeon, to proceed to Port Townsend, W. T., relieve P. A. Surgeon Mead, and assume charge of the Service, April 14, 1884. *Urquhart, F. M.*, Assistant Surgeon, granted leave of absence for thirty days, May 22, 1884. *Yemans, H. W.*, Assistant Surgeon, to report to Capt. M. A. Healey for duty as medical officer during cruise of Revenue Cutter "Corwin," April 16, 1884. *Glennan, A. H.*, Assistant Surgeon, to proceed to Mobile, Ala., for temporary duty during sickness of P. A. Surgeon Goldsborough, June 17, 1884.

APPOINTMENT: *Brooks, Stephen D., M. D.*, of Massachusetts, having passed the examination required by the regulations, was appointed an Assistant Surgeon by the Secretary of the Treasury, May 15, 1884. (Dr. Brooks had previously served as an Acting Assistant Surgeon from March, 1883, to May, 1884.)